

Executive Summary

ALAMEDA COUNTY CONGESTION MANAGEMENT AGENCY

The Alameda County Congestion Management Agency (CMA) was created in 1991, subsequent to the passage of Proposition 111, in which California voters recognized the need to address growing traffic congestion throughout the state. Proposition 111 increased statewide fuel tax to fund transportation projects and programs associated with tremendous growth in jobs and population in California. This proposition also required urban counties, such as Alameda County, to designate an agency to coordinate transportation planning, funding and other activities aimed at managing traffic congestion and improving air quality. The CMA was created through a joint powers agreement with Alameda County, its 14 cities and local transit operators to fulfill this role and responsibility.

The CMA's goals, duties and composition enable local governments to address the complex problem of traffic congestion. To help guide and improve Alameda County's transportation system, the CMA has the following responsibilities:

- Developing **planning** documents that guide transportation development and funding decisions;
- **Programming** the funds to agencies and jurisdictions for transportation improvements; and
- **Implementing** the projects and programs set forth in the planning and programming documents.

CONTEXT AND ORGANIZATION OF THE PERFORMANCE REPORT

The CMA develops transportation policies, programs and projects for Alameda County through the *Countywide Transportation Plan* and the *Congestion Management Program (CMP)*. The goal of these documents is to reduce traffic congestion and improve mobility and air quality. The CMA tracks progress toward the CMA's goals through two documents: the annual *State of Transportation—Performance Report* and the biennial *Level of Service Monitoring Report*.

The ***Performance Report***—this document—summarizes how the transportation system is functioning in Alameda County. It also identifies transportation improvements that may be considered in developing the Capital Improvement Program for the CMP and in updating the *Countywide Transportation Plan*. This report is organized around the annual performance of roadways, transit and the bicycle network. It also discusses progress towards reaching countywide pedestrian access goals, as defined in the 2006 *Countywide Pedestrian Plan*.

For each transportation mode measured, the following agencies provided applicable data:

- Roadways—Caltrans, Metropolitan Transportation Commission (MTC) and CMA
- Transit—Alameda County's transit operators
- Bicycle—15 jurisdictions in Alameda County
- Pedestrian - ACTIA

Below are major findings about how the different transportation modes performed in Alameda County in 2008 as compared to previous years. This is followed by a table that shows the annual progress of each transportation mode based on the most recent available data (Table ES-1). The data are categorized by performance measures identified in the CMP. For more detailed information and clarification, please refer to the complete report.

TRANSPORTATION MODES AND PERFORMANCE MEASURES

Roadways

A variety of methods are used to measure the performance of roadways in Alameda County, including:

- Duration and Amount of Congestion—How much traffic congestion is found on county freeways and arterial roadways?
- Average Speeds—How fast or slow are motorists traveling?
- Travel Times—How long does it take to travel from one location to another?
- Road Maintenance—What is the quality of roadway pavement throughout the county?
- Accidents—Where are accidents occurring in the county?

Duration and Amount of Congestion

Prepared biennially (during even-numbered years), the CMP requires that Level of Service (LOS) standards be established and monitored on the CMP-designated roadway system. (See Appendix A-1 for the CMP-designated roadway system.) Objectives of this monitoring effort are to:

- Determine the existing average travel speeds and LOS;
- Identify roadway segments in the county that are operating at LOS F (severely congested); and
- Identify long-term trends in traffic congestion on the CMP network.

The CMP roadways were most recently monitored during spring 2008. LOS is measured from A to F, with A representing no congestion and F representing the most congestion (see Appendix A-2 for LOS definitions). Overall, findings indicate congestion was reduced between 2006 and 2008. This is likely due

to the economic downturn and high price of gasoline. Below are highlights from the 2008 LOS Monitoring Report as compared to 2006 findings:

- Speeds on freeways generally improved while arterials remained relatively stable.
- The percentage of uncongested freeways—those performing at LOS A, B or C—increased from 55 percent to 66 percent in 2008.
- 2008 showed the highest rate of freeways performing at LOS A since 2000.
- The percentage of moderately congested freeways (those performing at LOS D and E) decreased from 33 to 23 percent.
- The percentage of freeways performing at LOS F dropped slightly from 12 to 11 percent in 2008.

In addition to LOS analysis, MTC has been collecting information since 2004 on how much time travelers are delayed due to congestion on freeways in Alameda County and the Bay Area. Caltrans collected this information prior to 2004. Data is collected to identify where and when congestion occurs, as well as how long it lasts. (See Appendix A-3 for Alameda County's Top 10 most congested corridors.) MTC's 2008 congestion data shows a 17 percent reduction over the past year, returning to its 2006 levels. Below are general findings from MTC's data:

- Eight of the Top 10 most congested locations in 2008 are those that were also in the Top 10 in 2007.
- The morning commute on westbound I-80 to the Bay Bridge remains the most congested corridor in Alameda County and the Bay Area.
- I-80 continues to occupy two of the Top 10 most congested segments in the Bay Area Region and four spots in Alameda County.
- I-580 continues to hold the second and third place of the Top 10 most congested corridors in the county.
- The largest decrease in the duration of congestion was during the afternoon commute on eastbound I-80, from east of Sterling Street to Powell Street, in Emeryville. The amount of time spent in congestion in this segment of I-80 reduced about 38 percent, from about six hours and forty minutes to about four hours.

Average Speeds

Average speed is the average vehicular travel speed over specified roadway segments during the peak period. Over the last 10 years, travel time during the afternoon peak, as measured by speed, remained relatively stable. Travel time during the morning peak has steadily increased since 2000.

Between 2006 and 2008, the travel time surveys showed a 3.2 mile per hour (mph) increase in average speeds on the freeway system and a 1.6 mile per hour increase in speeds on the arterials during the afternoon peak period. The morning peak period experienced an increase of 2.4 mph on freeways. The

Travel Times

Since 1996, the CMA has compared travel times for automobile and transit between 10 locations within Alameda County. Travel times for both modes improved since 2006 monitoring. In general, automobile travel time revealed greater improvement than transit times.

Road Maintenance

MTC monitors the quality of pavement on local streets, throughout the county. They rank all roadway types between excellent and poor. They also weight the average Pavement Condition Index (PCI) for the general pavement condition in the county, as well as for each jurisdiction. PCI is rated from 1 to 100, with 100 representing new roads.

In 2008, approximately 79 percent of all the roadways in Alameda County were reported to be in fair to excellent condition. Pavement in poor to very poor condition represented 21 percent of the county's roadways, about a six percent increase from the previous year. Overall, the average PCI on Alameda County roadways for 2008-2009 was 66, approximately the same as reported last year. See Appendix A-4 for PCI by jurisdiction.

Accidents

Although accident rates on Alameda County freeways have generally declined over the past year, accidents along I-238 increased almost eight percent. Ongoing construction (widening) along the segment may have contributed to this increase. Of all the freeways, SR-84 had the largest reduction of accidents (30 percent reduction since 2007). I-680 and I-580 also had relatively large reductions in accidents at 25 percent and 24 percent, respectively.

Transit

A variety of methods are used to measure the level of transit use in Alameda County, including:

- Ridership—How many people used transit?
- Service Coordination—How well are services, provided by different operators, being coordinated among destinations?
- Vehicle Maintenance—How often and to what extent do vehicles need repair? How does vehicle maintenance affect travel?
- Routing—How much transit service is provided?
- Frequency—How often is transit available?

Ridership

Overall, transit ridership has declined over two percent since 2007. AC Transit, BART, Livermore-Amador Valley Transportation Agency (LAVTA) and Alameda Harbor Bay Ferry maintained fairly level ridership numbers compared to the previous year. Union City Transit and ACE (Altamont Commuter Express) experienced increased ridership, while Alameda/Oakland Ferry experienced a decrease in ridership.

Service Coordination

Alameda County continues to provide multiple locations where riders can connect between various transit providers. Such coordination serves a number of transportation terminals during peak commute periods, excluding school breaks. To date, the greatest numbers of transfer opportunities are found along the BART lines. In addition, Hayward Greyhound, AC Transit and LAVTA continue to make strides to expand connectivity.

Vehicle Maintenance

Bus and rail operators use different indicators to manage vehicle maintenance: bus operators report on Miles between Mechanical Road Calls; and rail operators report on the Mean Time between Failures. Improvements in vehicle maintenance are generally attributed to aggressive maintenance programs and operational improvements. Declines in maintenance are due to aging fleets.

In Alameda County, bus operators include AC Transit, LAVTA and Union City Transit. During FY 2008-2009:

- AC Transit reported a stable amount of miles between road calls, compared to the previous year;
- LAVTA showed nearly 20 percent increase in miles between road calls; and
- Union City Transit reported a 30 percent decrease of miles between road calls.

Rail operators include BART and ACE:

- BART reduced the mean time between service delays by 11 percent since the previous year, beginning to reverse a five-year trend of increased service delays; and
- ACE showed a 17 percent reduction in mean time between service delays in 2008.

Routing

Routing measures how many passengers use transit. Since FY 2002-2003, transit operators in the county have provided more frequent headways, more routes and more route miles to more people. In general, although service has varied year to year, more transit service is being provided and more people are being served.

Compared to last year, transit service: covered slightly more directional route miles (two percent) and provided slightly less frequent service and fewer routes (just over two percent). Also, the number of passengers riding transit decreased about two percent.

Frequency

Frequency is measured by how often transit service is provided on each route. For example: BART and bus service are typically measured by the number of minutes between vehicles; and Capitol Corridor and ACE is measured by the number of train lines provided throughout the day. Frequency of transit service has remained fairly stable with the exception of service changes for Union City and LAVTA towards the end of Fiscal Year 2008-09.

Bicycle Network

The Performance Report measures progress towards implementing the *Countywide Bicycle Plan* (CMA Board adopted in 2001, CMA and ACTIA Boards adopted an amended Plan in 2006). Three methods are used to measure progress toward meeting the Plan's goals:

- Completed High Priority Projects
- Bicycle Counts
- Bicycle Collisions with Motor Vehicles

Completed High Priority Projects

Of the Plan's 549-mile Vision Network, 233 miles have been constructed, or about 42 percent of the Vision network. The Plan includes a list of 28 miles of High Priority projects, or projects expected to be completed within four years of adoption of the Bike Plan update (see Appendix C-1). In FY 2008-2009, local jurisdictions reported progress on two of the 15 High Priority projects. Progress includes completing plans, conducting environmental studies, maintenance and engineering and securing funding.

Bicycle Counts

Since 2002, local jurisdictions have monitored the number of bicyclists traveling through 12 major intersections across the county (as part of CMA's LOS Monitoring Report). Additionally, MTC has conducted bicycle counts at three additional locations since 2002 and UC Berkeley initiated counts in 2009 in the same three locations. Of the 15 intersections monitored, 12 showed an increase in use and three showed a decrease in the past year. Since 2002, the most active bicycling location is the Milvia/Hearst intersection in Berkeley, while bicycling at the Fremont location has steadily declined. The number of people bicycling likely increased in 2008 due to record high gasoline prices.

Bicycle Collisions with Motor Vehicles

In 2008, motor vehicle-involved bicyclist collisions resulting in injuries and fatalities increased by 26 percent, from 534 to 673 collisions since 2007.

Pedestrian Access

The CMA Board and ACTIA adopted the first Countywide *Strategic Pedestrian Plan* in October 2006. The Pedestrian Plan identifies and prioritizes pedestrian improvements and programs to increase walking and improve safety on a countywide level. Performance measures to monitor progress toward the Plan's goals and objectives are being developed, and may include:

- Completed Projects
- Pedestrian Counts
- Pedestrian Collisions with Motor Vehicles

Completed Projects

Funding for capital projects in the Pedestrian Plan are focused in areas of countywide significance, defined as “places that serve pedestrians traveling to and from a variety of locations through Alameda County and beyond.” Three targeted areas and corresponding capital projects and programs include providing access to:

- Transit
- Activity Centers
- Inter-jurisdictional Trails

Four projects of countywide significance completed in FY 2008-2009, include:

- City of Alameda: Atlantic/Webster Streets Intersection Improvements;
- Hayward: San Francisco Bay Trail Eden Landing;
- San Leandro: San Francisco Bay Trail Oakland/San Leandro Connector; and
- Oakland: San Francisco Bay Trail Tidewater Segment.

Pedestrian Counts

As shown in Appendix D-1 the UC Berkeley Traffic Safety Center in 2009 and MTC in 2002 collected data to measure pedestrian mobility trends. Pedestrians were counted in the weekday afternoons at three intersections in Berkeley, Dublin and San Leandro. In comparing the two data sources by year, two locations (Dublin and San Leandro) showed an increase, while Berkeley counts remained relatively stable. Additional research on pedestrian mobility is underway.

Pedestrian Collisions with Motor Vehicles

In 2008, the reported countywide motor-vehicle-involved pedestrian collisions, resulting in injuries and fatalities, increased by 12 percent, from 609 to 682 pedestrians. The number of collisions represents a significant increase from 2004 data (see Appendix D-2).

Table ES.1—Performance of Alameda County Transportation System

PERFORMANCE MEASURE	OBJECTIVE OF CMP	2008-2009 RESULTS	OBSERVATION
ROADWAYS			
Congestion (<i>Level of Service</i>)	<ul style="list-style-type: none"> • Mobility • Air Quality 	<p><i>Freeways:</i> Uncongested (LOS A, B, C): increased by 11 percent; Moderately congested (LOS D and E): decreased by 10 percent; Severely congested LOS F): decreased by one percent</p> <p><i>Arterials:</i> Uncongested increased three percent; moderately congested decreased four percent; and severely congested remained the same.</p>	From 2006 to 2008, freeways improved and arterials remained steady.
Average Speed	<ul style="list-style-type: none"> • Mobility • Air Quality • Land Use 	<p>Freeways: 51 mph for the afternoon peak</p> <p>Freeways: 52 for the morning peak</p> <p>Arterials: 26 mph for the afternoon peak</p>	Average speeds increased slightly (1.6 to 3.2 miles per hour) for arterials and freeways.
Travel Time (<i>Origin and Destination</i>)	<ul style="list-style-type: none"> • Mobility • Air Quality • Land Use 	In general, transit trips continue to take 2 to 5.5 times longer than auto for the 10 travel location pairs studied. Consistently, Fremont-Pleasanton has the highest transit travel times, which are over 5.5 times longer than auto.	Overall, auto travel time has reduced and transit times have increased since 2006. Most transit delay is associated with transfer between lines.

PERFORMANCE MEASURE	OBJECTIVE OF CMP	2008-2009 RESULTS	OBSERVATION
Congestion (<i>Vehicle Hours of Delay</i>)	<ul style="list-style-type: none"> Economic Air Quality 	<ul style="list-style-type: none"> Congestion decreased on most of the top 10 corridors in 2008, with 53,000 VHD in 2008, which is down from 63,900 VHD in 2007, a decrease of 17 percent. Congestion on eastbound I-80 across the bridge in the afternoon peak decreased seven percent compared with 2007. Congestion on EB I-580 in the afternoon decreased by 29 percent compared to 2007. 	The congestion reduced along most corridors in county due to the economic downturn.
Road Maintenance (<i>PCI</i>)	<ul style="list-style-type: none"> Economic 	Excellent: 10 percent Very Good: 23 percent Good: 23 percent Fair: 23 percent Poor: 15 percent Very Poor: six percent	Percentage of roads reported to be in good or satisfactory condition was stable (reduced by one percent).

PERFORMANCE MEASURE	OBJECTIVE OF CMP	2008-2009 RESULTS	OBSERVATION
Accidents	<ul style="list-style-type: none"> • Mobility • Air Quality • Economic 	<p>The following changes in total number of accidents occurred since 2007:</p> <ul style="list-style-type: none"> • I-680 had a 25 percent reduction. • I-580 had a 24 percent reduction. • SR-84 had a 30 percent reduction. • I-238 had an eight percent increase. 	<ul style="list-style-type: none"> • Accident rates generally reduced in 2008, with the exception of I-238. • Reductions may have been influenced by lessened congestion associated with the economic downturn.
TRANSIT			
Ridership	<ul style="list-style-type: none"> • Economic • Air Quality • Land Use 	Transit ridership in terms of total annual passenger boardings decreased by 2.3 percent in 2008 compared to 2007.	Likely due to the economic downturn.
Service Coordination	<ul style="list-style-type: none"> • Mobility • Air Quality 	Transfer facilities are located at BART, AMTRAK, ACE, Dublin and Livermore Transit Centers, two malls, Greyhound and ferry terminals	BART offers the greatest number of transfer opportunities.

PERFORMANCE MEASURE	OBJECTIVE OF CMP	2008-2009 RESULTS	OBSERVATION
Vehicle Maintenance	<ul style="list-style-type: none"> Air Quality 	<p><i>Bus Service:</i> Miles between mechanical road calls reduced for Union City Transit, increased for LAVTA, and stayed stable for AC Transit.</p> <p><i>Rail:</i> Mean time between service delays reduced by 11 percent for BART, beginning to reverse a five-year upward trend, and reduced by 17 percent for ACE.</p>	Improvements in transit vehicle maintenance can be attributed to aggressive maintenance programs and operational improvements. Decreases in maintenance are attributed to aging fleets.
Routing	<ul style="list-style-type: none"> Mobility Air Quality Land Use 	Transit service coverage and passenger boardings both reduced by two percent.	Reduction in transit service coverage and passenger boardings parallel the downturn in the economy.
Frequency	<ul style="list-style-type: none"> Mobility Air Quality Land Use 	LAVTA cut fixed route service 30 percent the end of FY 2008-2009; Union City Transit terminated some of the Sunday service.	Reductions in transit frequency in 2008 show a response to the economic downturn.
BICYCLE			
Countywide Bike Plan	<ul style="list-style-type: none"> Mobility Air Quality 	Two High Priority projects showed progress in environmental, design and funding in 2008.	Bicycle facilities are progressing.